In the Claims

1. (Previously Presented) An x-ray generator for a CT scanner, the generator comprising:

a slip ring to transfer power to a rotating high voltage (HV) tank;

a rotatable x-ray tube operationally connected to the slip ring to receive power from the HV tank and project x-rays toward a subject to be scanned; and

a stationary inverter to provide AC power to the slip ring for transference to the HV tank[[.]],the stationary inverter having a number of power switches arranged in an H-bridge configuration, the configuration having a pair of outputs such that at least one output is connected to a resonant circuit that is connected to the slip ring.

2. (Canceled)

3. (Previously Presented) The x-ray generator of claim [[2]]1 wherein the resonant circuit is connected to the slip ring.

4. (Previously Presented) The x-ray generator of claim 3 wherein the resonant circuit includes a capacitor and an inductor connected in series.

5. (Previously Presented) The x-ray generator of claim [[2]]1 wherein the resonant circuit is connected to an input of a transformer and wherein the transformer has outputs connected to the slip ring.

6. (Original) The x-ray generator of claim 5 wherein the transformer has a turns ratio of 1:N and a transformer of the high voltage tank has a turns ratio of 1:X-N.

7. (Original) The x-ray generator of claim 6 wherein the slip ring has an effective inductance of Y/N^2.

8. (Currently Amended) A CT imager comprising:

a rotatable gantry having an imaging bore disposed therethrough, and a stationary base supporting the gantry;

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a slip ring disposed in the rotatable gantry and electrically connected to an x-ray tube and a HV tank, the HV tank designed to apply a HV potential to the x-ray tube; [[and]]

a power conditioner external to the gantry to receive a DC voltage and generate an AC voltage waveform that is applied to the HV tank through the slip ring, the power conditioner having an inverter connected to a series-resonant circuit that is connected to the slip ring; and

a transformer connected between the series-resonant circuit and the slip ring.

9. (Original) The CT imager of claim 8 further comprising a power distribution unit (PDU) disposed in the stationary base and wherein the power conditioner is disposed in the PDU.

10. (Original) The CT imager of claim 8 wherein the power conditioner is positioned in the stationary base.

11. (Previously Presented) The CT imager of claim 8 wherein the inverter is configured to supply an approximate 20k-1 MHz AC waveform to the slip ring.

12. (Original) The CT imager of claim 11 wherein the HV tank is configured to receive the AC waveform from the slip ring and transform the AC waveform to generate up to approximately 160 kV therefrom.

13. (Canceled)

14. (Previously Presented) The CT imager of claim [[13]]8 wherein the at least one resonant circuit is configured to limit frequency content of current and voltage waveforms on the slip ring.

15. (Canceled)

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16. (Original) The CT imager of claim 15 wherein the transformer has a turns ratio of 1:N and wherein a transformer of the high voltage tank has a turns ratio of 1:X-N.

17. (Original) The CT imager of claim 16 wherein the slip ring has an effective inductance of Y/N^2.

18. (Currently Amended) A CT scanner comprising:

a rotatable x-ray tube and a rotatable HV tank, the HV tank configured to apply a high voltage potential to the x-ray tube;

a slip ring to transfer current to the HV tank;

a stationary base having an inverter to supply AC power to the slip ring for transference to the HV tank; [[and]]

the inverter having at least one resonant circuit connected to the slip ring; and

wherein the at least one resonant circuit includes a pair of resonant circuits.

19. (Previously Presented) The CT scanner of claim 18 further comprising a transformer connected to the at least one resonant circuit and the slip ring.

20. (Canceled)

21. (Original) The CT scanner of claim 18 having a gantry rotatable at a speed of approximately 0.1 to 0.3 seconds per revolution.

22. (Previously Presented) The CT scanner of claim 18 wherein the inverter is designed to supply 300 VAC.

23. (Original) The CT scanner of claim 18 further comprising a power distribution unit having the inverter disposed therein.

24. (Original) The CT scanner of claim 18 incorporated into one of a medical imaging machine and a parcel inspection apparatus.

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25. (New) A CT imager comprising:

a rotatable gantry having an imaging bore disposed therethrough, and a stationary base supporting the gantry;

a slip ring disposed in the rotatable gantry and electrically connected to an x-ray tube and a HV tank, the HV tank designed to apply a HV potential to the x-ray tube;

a power conditioner external to the gantry to receive a DC voltage and generate an AC voltage waveform that is applied to the HV tank through the slip ring, the power conditioner having an inverter connected to a series-resonant circuit that is connected to the slip ring; and

wherein the inverter is configured to supply an approximate 20k-1 MHz AC waveform to the slip ring.

26. (New) The CT imager of claim 25 wherein the HV tank is configured to receive the AC waveform from the slip ring and transform the AC waveform to generate up to approximately 160 kV therefrom.

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